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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,876	07/19/2000	Anatoly Z. Rosenflanz	55763USA3A	1595

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT

PAPER NUMBER

1755

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16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,876

Applicant(s)

ROSENFLANZ, ANATOLY Z.

Examiner

Michael A Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2002 and 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-28,30-35,41 and 44-89 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12,16-28,30-35,41 and 44-89 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15. 6) ☐ Other:

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

NEW MATTER REJECTION (previously defined).

The amendment filed 1/22/02 to page 41 of the specification (which is the same as the amendment filed 12/28/00) is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendment to page 41, line 22 which changed the width of the phases in figure 9 from **“up to about 1 micrometer”** to **“up to about 2 micrometers”** is new matter because the specification does not provide support for this. Applicant states that support for this amendment can be found in figure 9. The examiner **fails** to see how this figure provides support for this amendment.

Applicants state that the amendment filed 1/22/02 amends the paragraph on page 41 to define the original, as filed text. To the contrary, the original, as filed text states that the section has a size up to about 1 micrometer. The amendment in question defines a size of “up to about 2 micrometers, which is not the originally filed text. Applicants also state that the scanning electron photomicrograph speaks for itself (i.e. assuming this is referring to the size). The examiner disagrees because a size can not be deciphered from this photomicrograph.

Applicant is required to cancel the new matter in the reply to this Office Action.

PREVIOUS INDEFINITE REJECTION:

Claims 46, 50, 51 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 46 and 52 are indefinite as to the converting step because the examiner is unclear as to how this is accomplished, thus rendering the scope of the claims unclear.

The converting step is still indefinite, contrary to applicants position, because page 18, line 10-page 20, line 3 does not clearly define that the limitation defined on these pages are the converting step.

The other claims are indefinite because they depend on indefinite claims.

NEW INDEFINITE REJECTIONS:

Claims 81, 84, 85 and 89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 81, 84, 85 and 89 is indefinite because the examiner is unclear as to what "mild steel" and "tool steel" encompass, thus rendering the scope of the claims unclear. What is considered "mild steel" and what is considered "tool steel"?

PREVIOUS ART REJECTIONS:

- (1) Claims 2-4, 9-12, 16-19, 21-25, 27, 28, 30, 31, 33-35, 41, 44-52 and 75-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waku et al. (5,981,415) for the same reasons set forth in the previous office action which are incorporated herein by reference.
- (2) Claims 53-74 and 81-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waku et al. (5,981,415) in view of Brothers et al. (4,035,162) for the same reasons set forth in the previous office action which are incorporated herein by reference. **New claims 81-89 are added into this rejection because one skilled in the art would have found the abrading method of the primary reference to be applicable to any desired surface, notwithstanding the ones defined by the Brothers.**

Applicant's arguments filed 1/31/02 have been fully considered but they are not persuasive.

With respect to rejection (1) above, applicants argue that Waku et al. fail to teach a fused abrasive which contains the claimed specific tertiary eutectic and claimed specific binary eutectic. The examiner disagrees because the reference clearly teaches eutectics which fall within the claimed tertiary and binary eutectic compositions. The reference teaches at least two phases in the eutectic which reads on a tertiary eutectic. The reference also defines various phases that can be present, thus the various phrase defined in combination with "two or more phrase in the eutectic" read on the claimed eutectics. Since applicants have not argued the claimed eutectic composition in detail, no further comment on this is necessary. In addition, applicants state that it is not clear that the result of the reference would be a eutectic. This is not

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persuasive because in column 5, lines 18-20 the reference states that the combination is a eutectic system. In addition, applicants appear to argue that this reference does not teach the "specified nominal grade" as required by the instant claims. The examiner disagrees because the reference states that the material is crushed and it is the examiners position that this crushed material will have a size which either falls within the category of coarse or fine, which is applicants definition of specified nominal grade. In addition, the desired particle size is a function of the application and mere recitation of that size does not represent a patentable distinction over this reference to one of ordinary skill in the art, lacking evidence to the contrary. Applicants apparently argue the "abrasive particle" limitation, as defined in the previous office action (i.e. Waku et al. teaches that fused materials based on alumina and yttria are known to be used as abrasive materials, thus making the use of the fused material according to the primary reference obvious as an abrasive material), as not being obvious, yet fail to define any reasons supporting this position. Clearly one skilled in the art from reading column 2, line 54 and the paragraph bridging columns 8-9 of Waku would find the use of the material according to the EP reference obvious as an abrasive. Applicants state that this obviousness rejection is based on improper hindsight. The examiner disagrees because one skilled in the art would have known that applications of alumina/oxide composites includes abrasive applications, as defined in Waku.

With respect to rejection (2) above, applicants fail to argue the combination of Waku et al. (5,981,415) in view of Brothers et al. (4,035,162).

NEW REJECTIONS:

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Claims 5-8, 20, 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waku et al. (5,981,415).

After further review of the reference and since Waku et al. states that the "material may have a uniform structure which does not include colonies", it is the examiners position that the term may in this statement does not positively exclude colonies from being present, thus said colonies are within the scope of the reference. In view of colonies being present, the limitations of the above claims are met because a colony must have a size and the broad interpretation of colonies includes colonies having the claimed size in the absence of any critical evidence showing the contrary.

IT IS STRONGLY SUGGESTED THAT APPLICANTS EITHER (1) SHOW COMPARATIVE EVIDENCE FOR THE CLAIMED EUTECTIC (I.E. SHOW THAT THE CLAIMED EUTECTIC PRODUCES UNEXPECTED RESULTS OVER OTHER EUTECTICS OF THE REFERENCE) or (2) INCORPORATE THE LIMITATIONS OF CLAIMS 13-15 INTO THE INDEPENDENT CLAIMS.

Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the teachings as set forth above, it is still the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

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"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species *prima facie* obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

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3/02



MICHAEL MARCHESCHI
PRIMARY EXAMINER